

Page 16, line 14, change "109" to --108--.

REMARKS

Claims 1-5 stand rejected under judicially-created obviousness-type double patenting over claims 6-10 of U.S. Patent No. 5,712,191 in view of Garfinkel. Claims 1-21 stand rejected over Garfinkel in view of Mori. Claims 1-21 also stand rejected over Nakajima in view of Garfinkel. All of these contentions are respectfully traversed for reasons set forth herein.

The Examiner bases this rejection on the Office Action's characterization of Garfinkel. For reasons set forth herein, it is respectfully submitted that the Examiner's characterization of Garfinkel ignores an important issue.

Paragraphs 3, 5 and 6 of the office action contend that the Garfinkel substrate is coated with an insulating layer of silicon dioxide. The film is exposed to nuclear particle irradiation which produces a damage track in the unshielded regions of the silicon layer.

Garfinkel explains column 3, lines 23-30 that the silicon dioxide, unprotected by the photoresist, is then etched

using buffered hydrofluoric acid. That buffered acid includes one part concentrated hydrofluoric acid (48%) and then parts of ammonium fluoride in water (40%) by weight. This is done until the damaged tracks produced by the fission fragments have been etched completely through the silicon dioxide all the way to the silicon. This is shown in Figure 3. It leaves a small hole in the final product.

Note however, that from this description, the silicon layer is not removed, but rather a part of the silicon dioxide is removed. Hence, Garfinkel does not teach removing the silicon layer rather Garfinkel teaches removing part of the silicon dioxide layer

In contrast, the present claims define etching or removing the particular region of a semiconductor film. This semiconductor film is recited as being "the peripheral portions of said patterned semiconductor film" in independent claim 1, "said selective region" in independent claim 6, "at least said selected region" in independent claim 12 and 21. The prior art cited by the Examiner removes the insulation, not the semiconductor material itself. Therefore, it can be seen that the claims as now amended are different than the references cited by the Examiner, and therefore all of these claims should be in

condition for allowance.

Applicants also call attention to the attached list of patents which are related to the use of nickel as a gettering agent, as listed on the attached form PTO-1449. Since the same field is generally discussed in this application, it is respectfully suggested that a reasonable Examiner would find these references to be relevant. Official consideration and citation is requested.

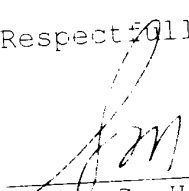
Since this submission is being made after the receipt of a notice on the merits, the rule 17(p) certification fee of \$240 is attached.

In view of the above amendments and remarks, all of the claims should be in condition for allowance. A formal notice to that effect is respectfully solicited.

If there are any other charges, or any credits, please apply them to Deposit Account No. 06-1050.

Respectfully submitted,

Date: 7/13/98

  
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